CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for identifying customer premises equipment in a distributed network, the method comprising:

    generating a device identifier code that specifically identifies a product model of a customer premises equipment device in response to receiving a point-to-point over Ethernet (PPPoE) packet communicated over the distributed network;

    broadcasting a point-to-point over Ethernet (PPPoE) active discovery initiation (PADI) packet, wherein the PPPoE active discovery initiation (PADI) packet includes a tag that specifically identifies a product model of a customer premises equipment device, wherein the tag is based on the device identifier code;

    receiving a point-to-point over Ethernet (PPPoE) active discovery offer (PADO) packet;

    transmitting a point-to-point over Ethernet (PPPoE) active discovery request (PADR) packet in response to receiving the PADO packet, wherein the PADR packet includes a tag that specifically identifies a product model of the customer premises device;

    receiving a point-to-point over Ethernet (PPPoE) active discovery session (PADS) packet; and

conducting an Ethernet communication session.

2. (Original) The method of claim 1, wherein the tag is a host-uniq tag.

3. (Original) The method of claim 1, wherein the device identifier code is a nine bit binary number.

4. (Original) The method of claim 1, wherein the customer premises equipment is a device that terminates PPPoE communications.

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5. (Original) The method of claim 1, further comprising receiving a point-to-point over Ethernet (PPPoE) active discovery packet that includes the tag and storing a device identifier code that identifies the product model in a database.

6. (Currently Amended) A method comprising:

sending a point-to-point over Ethernet (PPPoE) active discovery packet, wherein the
   PPPoE active discovery packet includes a tag that specifically identifies a product
   model of a customer premises equipment (CPE) device; and

generating a device identifier code based on the tag in response to receiving the PPPoE
   active discovery packet.

7. (Cancelled)

8. (Original) The method of claim 6, wherein the tag is a host-uniq tag.

9. (Original) The method of claim 6, wherein the PPPoE active discovery packet is a PPPoE active discovery initiation (PADI) packet.

10. (Original) The method of claim 6, wherein the PPPoE active discovery packet is a PPPoE active discovery request (PADR) packet.

11. (Original) The method of claim 6, wherein the customer premises equipment device is a router.

12. (Original) The method of claim 6, wherein the customer premises equipment is a switch.

13. (Original) The method of claim 6, further comprising receiving a PPPoE active discovery packet.

14. (Original) The method of claim 13, wherein the PPPoE active discovery packet received is a PPPoE active discovery offer (PADO) packet.

15. (Original) The method of claim 13, wherein the PPPoE active discovery packet received is a PPPoE active discovery session (PADS) packet.

16. (Original) A method comprising:
receiving a point-to-point over Ethernet (PPPoE) active discovery packet, wherein the PPPoE active discovery packet includes a tag that identifies a product model of a customer premises equipment device; and
determining the product model of the customer premises equipment device based on the tag.

17. (Original) The method of claim 16, wherein the step of determining further comprises storing the product model of the customer premises equipment device in a database.

18. (Original) The method of claim 17, further comprising managing the database based upon the product model of the customer premises equipment device.

19. (Original) The method of claim 16, wherein the PPPoE active discovery packet is a PPPoE active discovery initiation (PADI) packet.

20. (Original) The method of claim 16, wherein the PPPoE active discovery packet is a PPPoE active discovery request (PADR) packet.

21. (Original) A customer premises equipment (CPE) device comprising:
a network interface; and
a module coupled to the network interface, said module configured to transmit a point-to-point over Ethernet (PPPoE) active discovery packet including a tag, the tag comprising a device identifier field that uniquely identifies a CPE product model.

22. (Original) The customer premises equipment device of claim 21, wherein the device identifier field comprises a predefined binary number.

23. (Original) The customer premises equipment device of claim 21, wherein the tag is a host-uniq tag.

24. (Original) A system for identifying a communications device, the system comprising:
an access concentrator configured to receive an active discovery packet having a tag
    comprising a device identifier field, wherein the active discovery packet is
    arranged for transmission by a communications device capable of terminating a
    point-to-point connection, and wherein the communications device identifier field
    uniquely identifies a product model associated with the communications device;
    and
a database sever to store the device identifier field.

25. (Original) The system of claim 24, wherein the point-to-point connection is a point-to-point over Ethernet (PPPoE) connection.

26. (Original) The system of claim 24, wherein the access concentrator is a broadband remote access server.

27. (Original) A data packet for use in a distributed network, the data packet comprising:
an Ethertype payload field including a host-uniq tag value indicating a model type of a
    digital switching device.

28. (Original) The data packet of claim 27, further comprising:
a service provider destination address, the service provider destination address associated
    with a destination node within the distributed network; and
a service provider source address, the service provider source address associated with a
    storage device at a source node within the distributed network.

29. (Original) The data packet of claim 28, wherein the distributed network is an Ethernet distributed network.

30. (Original) The data packet of claim 28, wherein the model type of the digital switching device is a nine bit binary device identifier code associated with customer premises equipment.

31. (New) The method of claim 1, wherein the Ethernet communication session is conducted via a distributed IP network.

32. (New) The method of claim 1, wherein the Ethernet communication session is conducted via a digital subscriber line (DSL) connection.

33. (New) The method of claim 1, wherein the point-to-point over Ethernet active discovery offer packet is received from a broadband remote access server.

34. (New) The method of claim 1, wherein the Ethernet communication session is conducted via an asynchronous transfer mode (ATM) connection.

35. (New) The method of claim 1, wherein the Ethernet communication session is conducted via an asymmetric digital subscriber line (ADSL) connection.

36. (New) The method of claim 6, wherein the customer premises equipment device is an asymmetric digital subscriber line router.

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